

Procurement Reference No. EV 03-0055-B

Task Assignment and Scope of Work

Task B: Narrative Toxics Standard Implementation Procedures

1. Task Assignments

This Task Assignment is for professional environmental consulting services to assist the Department in developing detailed procedures for implementing Arizona's antidegradation policy and other narrative water quality standards. ADEQ has initially identified four implementation procedures documents that must be produced. ADEQ is requesting Task Assignment Offers (TAO) to write implementation procedures for the State's Antidegradation Rule (Task A) and the Narrative Toxics Standard (Task B). Task Assignments for the Narrative Nutrient Standard (Task C) and the Narrative Clean Sediment/Bottom Deposit Standard (Task D) will be forthcoming. Offerors may submit a TAO for individual Tasks or any combination of Tasks. A detailed set of implementation procedures are necessary to ensure that 1) the requirements of the state antidegradation policy and/or narrative water quality standards are effectively met; and 2) surface water quality is adequately protected. ADEQ is seeking a Contractor to provide research, policy analysis, technical support, and technical writing services.

2. Regulatory Authority

- 2.1 A.R.S. §49-202(A) designates ADEQ as the state agency for all purposes of the Clean Water Act. As the state agency responsible for implementing the Clean Water Act in Arizona, ADEQ has a duty to adopt water quality standards for Arizona's rivers, streams, and lakes.
- 2.2 Water quality standards define the water quality standards of a water body or a portion of a water body by designating the use or uses to be made of the water, by setting water quality criteria necessary to protect the designated uses, and by preventing degradation of water quality. ADEQ has adopted, by rule, numeric and narrative water quality standards for Arizona's surface waters, including A.A.C. R18-11-108(A)(5) which states:
 - 2.2.1 A surface water shall be free from pollutants in amounts or combinations that are...toxic to humans, animals, plants, and other organisms.
 - 2.2.2 This standard is commonly referred to as the "no toxics in toxic amounts" or the narrative toxics standard.
- 2.3 Where a State has adopted a narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards or may be developed separately as implementation procedures (40 CFR 131.11).

3. Legal Requirements to Develop Implementation Procedures

- 3.1 Federal regulations require that each state develop implementation procedures to ensure that narrative criteria for toxics pollutants are attained [*See* 40 CFR §131.11(a)(2)]. The federal regulations further state that implementation procedures should address all mechanisms used by the state to ensure that the narrative criteria are attained.
- 3.2 Recently-enacted state law requires ADEQ to develop implementation procedures for narrative water quality standards before they can be used for §305(b) water quality assessment or §303(d) listing purposes. A.R.S. §49-232(F) requires ADEQ to adopt implementation procedures for each narrative standard that specifically identify the objective bases for determining that a violation of the narrative standard exists. State law requires that the availability of the implementation procedures be publicly noticed and that the public be given an opportunity to comment on the procedures. Finally, no Total Maximum Daily Load (TMDL) analysis can be prepared that is designed to achieve compliance with a narrative water quality standard until implementation procedures are adopted by ADEQ.

4. Existing narrative toxics standard implementation procedures

ADEQ has previously developed Interim Whole Effluent Toxicity Implementation Guidelines for Arizona and draft Narrative Toxicity Standard Implementation Procedures for Arizona (March 15, 2002) [*See* Attachments]. These documents provide background on the agency's early efforts to develop a guidance document primarily for the purpose of in-house NPDES permitting. Section 6 below provides the minimum elements required for the comprehensive narrative toxics implementation procedures document.

5. Minimum elements of Arizona's implementation procedures for the narrative toxics standard

- 5.1 Specific, scientifically defensible methods by which the state will implement chemical-specific criteria for toxic pollutants, including specific methods for applying chemical-specific criteria in AZPDES permits, developing or modifying chemical-specific criteria via translator procedures, and calculating site-specific criteria based on local water chemistry or biology. Implementation of chemical-specific controls is required by federal regulation at 40 CFR §122.44(d)(1).
- 5.2 Methods for developing and implementing toxicity controls in AZPDES permits, including whole effluent toxicity. These methods should include how to determine whether a discharge has reasonable potential to cause or contribute to a narrative toxics standard violation. EPA regulations require NPDES permits to contain whole effluent toxicity limits where a permittee has been shown to cause, has the reasonable potential to cause, or contribute to an excursion above the narrative toxics standard. The implementation procedures should, at a minimum, specify or reference the methods to be used in implementing WET controls for point source discharges.
- 5.3 Effluent characterization methods that ADEQ can use to identify pollutants to be regulated in a point source discharge (with and without effluent monitoring data).
- 5.4 Methods for selecting appropriate hardness, pH, and temperature variables for criteria whose toxicity is dependent upon those variables.

- 5.5 Methods for identifying compliance thresholds in AZPDES permits where calculated limits are below detection limits.
- 5.6 Implementation procedures for developing mixing zones for toxic pollutants, including specific procedures for controlling the size and in-zone quality of mixing zones.
- 5.7 Critical design flows to be used in translating numeric criteria for toxic pollutants into AZPDES permit limits.
- 5.8 Use of ambient toxicity testing to implement the narrative toxics standard.
- 5.9 Use of fish consumption advisories to implement the narrative toxics standard, including procedures used to develop and issue the advisory.
- 5.10 Use of biomonitoring methods where numerical criteria cannot be established or to supplement numerical criteria.
- 5.11 Other methods and information needed to apply the narrative toxics standard on a case-by-case basis (e.g. fish kills, fish tissue concentrations, beach closures, storm water).

6. AZPDES Permitting Program

- 6.1 AZPDES permits must ensure that point source discharges do not cause exceedances of numeric or narrative water quality standards for toxic pollutants. If, after technology-based effluent limits are applied, a point source discharge may exceed an applicable water quality standard, a water quality-based effluent limit (WQBEL) must be imposed by the permitting authority. Federal NPDES regulations require that all effluents be characterized by the permitting authority to determine the need for WQBELs in a permit [*See* 40 CFR §122.44(d)]. In deciding whether WQBELs are needed to protect surface water quality, an AZPDES permit writer must determine whether a point source discharge has the reasonable potential to cause, or contribute to an excursion of a numeric or narrative water quality standard. If an AZPDES permit writer determines that a point source discharge has the reasonable potential to cause or contribute to an in-stream excursion above the narrative toxics standard at R18-11-108(A)(5), the permit must contain effluent limits for whole effluent toxicity (WET), unless the permit writer demonstrates that chemical-specific effluent limits are sufficient to attain and maintain applicable numeric and narrative surface water quality standards. The document must contain specific procedures for conducting reasonable potential determinations that are consistent with EPA's Technical Support Document for Water Quality-based Toxics Control, U.S. Environmental Protection Agency, Office of Water, EPA/505/2-90-001 (March 1991) and the U.S. EPA NPDES Permit Writers Manual, U.S. Environmental Protection Agency, Office of Water, EPA-833-B 96-003 (December, 1996).
- 6.2 Federal regulations also required where a State has adopted narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria.

7. §305(b) Water Quality Assessment and Narrative Toxics Standard

The implementation procedures document must cover procedures for how the narrative toxics standard will be used in the water quality assessment process. §305(b) of the Clean Water Act requires that ADEQ report on general water quality conditions of Arizona's rivers, streams, lakes and reservoirs and identify waters that are not supporting their designated uses based on numeric and narrative water quality standards, including the narrative toxics standard. The procedures document must include implementation procedures that specifically identify the objective bases for determining whether a violation of the narrative toxics standard exists. ADEQ is further required by state law, A.R.S. §49-232, to consider only reasonably current credible and scientifically defensible data when making an assessment of whether narrative standards are met. The implementation procedures document must include credible data requirements for the narrative toxics standard including use of surrogate parameters or water quality conditions to evaluate a surface water for potential impairment due to a narrative toxics standard violation.

8. §303(d) Listings of Impaired Waters Based on Violations of the Narrative Toxics Standard

The implementation procedures document must cover procedures for how the narrative toxics standard will be used in the §303(d) listing process. §303(d) of the Clean Water Act requires states to list surface waters that are water quality limited. "Water quality limited waters" are surface waters that have been assessed by ADEQ as having impaired water quality that require more than existing technology and permit controls to achieve or maintain water quality standards, including narrative standards. §303(d) requires that impaired waters be identified and listed and prioritized for completion of a total maximum daily load [TMDL] analyses. The implementation procedures document must include procedures for identifying surface waters that are not meeting the narrative toxics standard. The document also must include credible data requirements to support the listing of surface waters under §303(d) because of violations of the narrative toxics standard. These requirements could include use of surrogate parameters or water quality conditions to determine impairment of a surface water due to a narrative toxics standard violation.

9. Public Participation

Each set of implementation procedures must be publicly noticed and the public given an opportunity to comment. ADEQ will conduct a stakeholder process to develop the implementation procedures. ADEQ will hold meetings to take public comment on draft implementation procedure documents. The Contractor will be required to participate in the stakeholder process and the public meetings to provide explanations of technical issues contained in the implementation procedures. The Contractor may be asked to respond to public comments and questions received during the public participation process relating to technical aspects of the implementation procedures and to assist ADEQ in the development of responsiveness summaries.

10. Submittals / Deliverables

The final deliverable for each Task is a document containing specific implementation procedures. In addition to hard copies of all implementation procedures documents, the Contractor shall provide final deliverables in electronic format compatible with the current ADEQ word processing software

(currently Wordperfect 8.0). Note: ADEQ is planning on converting to Microsoft Office word

processing software by late FY03. If or until that happens, final products must be submitted in Wordperfect 8.0.

11. Administrative Requirements

- 11.1 Contractor shall provide support to ADEQ in the stakeholder and public meetings, as required, and in responding to public comments, as needed. The timeframe for this work is yet to be determined.
- 11.2 Deliverables, technical correspondence and reports from the Contractor may be sent by express mail, or by fax with the original sent by regular mail, or hand delivered to ADEQ at the following address:

Steve Pawlowski, Project Manager
Water Quality Division
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007
Phone: (602) 771-4219
pawlowski.steve@ev.state.az.us

- 11.3 Correspondence to the Contract Officer shall be sent in the same manner as above to the following address:

Linda Wright, Contract Officer
Contracts and Procurement
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007
Phone: (602) 771-4711
wright.linda@ev.state.az.us

12. Task Assignment Offers (TAO)

- 12.1 Task Assignment Offers shall be prepared as described as described in the TMDL Development RFP's Special Terms and Conditions. Resumes need not be submitted with the TAO.
- 12.2 Please submit any questions regarding this TASOW in writing to the Contract Officer by November 13, 2002 by noon.
- 12.3 Offerors shall submit one original and two copies of the Task Assignment Offer. Offers shall be due at ADEQ Procurement, First Floor Lobby, 1110 W. Washington Street, Phoenix, Arizona, on **November 22, 2002 at 3:00 p.m.** Offers must be in the actual possession of ADEQ by the time and date above. Late offers will not be considered.
- 12.3.1 **Task Assignment Offers must be submitted in a sealed package with the Procurement Reference Number and the Offeror's name and address clearly indicated on the package.**
- 12.4 Evaluation of Task Assignment Offers: An initial evaluation of TAOs will be made on Adequacy of

Staff Resources. Contractors must provide staffing levels that are adequate to meet the requirements and timelines of the TASOW. ADEQ will further evaluate those TAOs that meet this requirement based on the factors below, listed in order of importance:

- 12.4.1 Experience, Expertise, and Reliability in Tasks related to policy analysis and development, technical report writing, and the implementation of surface water quality standards, including narrative toxic standards;
- 12.4.2 Method of Approach to the TASOW; and
- 12.4.3 Overall Cost.

**Timeline for Development of
Task B: Narrative Toxicity Standard Implementation Procedures**

	Deliverable X = Deliverable	FY' 2003												FY' 2004						Due Date
		Month																		
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	
1	() Kickoff Stakeholder Meeting																			December, 2002
2	() Stakeholder Meetings	.....				X														03/31/03
3	() Draft Procedures Document					X														04/30/03
4	() Stakeholder Meeting						X													05/31/03
5	() Final Procedures Document							X												07/31/03
6	() Stakeholder Meeting								X											08/15/03
7	() Public Review/Public Meetings								.....	X										09/30/03
8	() Stakeholder Meeting										X									10/15/03
9	() Rulemaking Process										.....		.....					X		04/30/04